Express Mail No.: EL984538900US Deposited On: December 17, 2003

Page __1 of __7

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Attorney's Docket Number 5838.076

Serial Number (0/738478) Not Yet Assigned

(Fill-A-Form 7.92)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant Richard D. Cummings, et al.

Filling Date Herewith

Group 1644

		·					(<u>J. S</u>	. PATENT DO	CUMENTS			
EXAM INIT.	<u> </u>	PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF
PG	AA	3	6	2	5	2	1	4	12/07/1971	Higuchi	128	260	
L	AB	3	9	9	5	4	4	4	12/07/1976	Clark et al.	62	306	
<u> </u>	AC	4	4	9	4	3	8	5	01/22/1985	Kuraoka et al.	62	306	
igwdap	AD	4	7	8	3	3	3	0	11/08/1988	Furie et al.	424	1.1	
	AE	4	8	4	9	5	1	3	07/18/1989	Smith et al.	536	27	
	AF	4	9	0	6	4	7	4	03/06/1990	Langer et al.	424	428	
	AG	4	9	2	5	6	7	3	05/15/1990	Steiner et al.	424	455	
	AH	5	1	1	4	8	4	2	05/19/1992	Plow et al.	424	85.8	
	AI	5	1	3	5	9	1	6	08/04/1992	Sims et al.	514	21	
	AI2	5	1	9	8	4	2	4	03/30/1993	McEver et al.	514	13	
	AJ	5_	2	1	1	9	3	6	05/18/1993	Brandley et al.	424	1.1	
	AK	5	2	4	0	8	3	3	08/31/1993	Nudelman et al.	435	70.21	
	AK2	5	3	7	8	4	6	4	01/03/1995	McEver et al.	424	143.1	
	AK3	5	4	6	4	7	7	8	11/07/1995	Cummings et al.	436	503	
	AL	5	7	6	7	2	4	1	06/16/1998	McEver	530	350	
	AM	5	8	2	7	8	1	7	10/27/1998	Larsen et al.	514	2	
	AN	5	8	4	3	7	0	7	12/01/1998	Larsen et al.	435	69.1	
	AO	5	8	5	2	1	7	5	12/22/1998	Cummings et al.	530	388	
	AP	5	8	8	0	0	9	1	03/09/1999	Cummings et al.	514	8	
	AQ	5	9	1	9	6	3	7	07/06/1999	McEver	435	7.21	
	AQ2	5	9	2	9	0	3	6	07/27/1999	McEver	514	25	•
	AQ3	6	1	7	7	5	4	7	01/23/2001	Cummings et al	530	388. 22	

<u> </u>	FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION														
EX.		DOCUMENT NUMBER								PUBLICATION DATE	COUNTRY OR PATENT	CLASS	SUBCLASS	Translation	
ļ	Ц					,					OFFICE			YES	NO
44		AR	0	1	5	3	.8	9	6	09/04/1985	EPO				
LV		AS	9	1_	0	6	6	3	2	05/16/1991	PCT				

PAUS EMPS 11/27/06

	 	FO	REIG	<u>N</u>	PAT	EN.	<u> </u>	RP	UBLISHED FO	REIGN PATEN	IT APP	LICATIO	N	
EXAM INIT.				DOCUI	MENT N	UMBER			PUBLICATION DATE	COUNTRY OR PATENT	CLASS	SUBCLASS	Trans	tation
M	-			Γ.	<u> </u>	Γ_	_	-		OFFICE		<u> </u>	YES	NO
	AT	9	1	0	7	9	9	3	06/13/1991	PCT		 	ļ	├
-	AU	9	1	1	9	5	0	1	12/26/1991	PCT				<u> </u>
-	AV	9	2	0	1	7	1	8	02/06/1992	PCT		<u> </u>		<u> </u>
	AW	9	2	1	6	6	1	2	10/01/1992	PCT		<u> </u>		ļ
 	AX	9	3	0	5	8	0	3	04/01/1993	PCT				ļ
H	BA	9	4	1	1	4	9	8	05/26/1994	PCT				
	BB	9	5	3	0	0	0	1	11/09/1995	PCT				
EXAM INIT.									OTHER I	/IATERIALS				
	BC	Ar	uffo e	t al.	. "CD	62/P-	Selec	tin Do	cognition and Muoloi	(Including, Author, Ti				
$\parallel \uparrow -$	BD		Aruffo et al., "CD62/P-Selectin Recognition and Myeloid and Tumor Cell Sulfatides", Cell, 67:35-44 (1991).											
#	BE	Ba	Aulabaugh et al., "Conformational Analysis of Bombesin Analogues", <u>Peptides</u> , 526-528 (1990). Battistutta et al. "Circular Dichroism and ¹ H NMR Studies on Bombolitin-related Peptides in Aqueous Solution											
	BF		Concarning 3DS wicelies", Peptides 525-526 (1992).											
 	+	+~	Beckstead et al., "Immunohistochemical Localization of Membrane and α-Granule Proteins in Human Megacaryocytes: Application to Plastic-Embedded Bone Marrow Biopsy Specimens", <u>Blood</u> , 67:285-293 (1986).											
 	BG	30.	Bevilacqua et al., "Identification of an Inducible Endothelial Leukocyte Adhesion Molecule", <u>Proc. Natl. Acad.</u> Sci. USA, 84:9238-9242 (1987).											
 	BH	Be ¹	Comple Comple	ua et ement	al., Regu	"Endo	thel:	ial Le teins	ukocyte Adhesion Moland Lectins", Science	ecule 1: An Inducibl e, 243:1160-1165 (03/	e Receptor 03/89)	for Neutrop	hils Rela	ted
	BI	Bie The	envenu Amer	et a ican	l., "l Physic	Molecu ology	lar Soci	Determ	inants of Shear Rate 1504-H1508 (1993).	Dependent Leukocyte	Adhesion in	n Postcapilla	ery Venul	e " ,
	BJ	I DA	erhulzo a Clor 194).	en et ned Co	al., ore 2	"Exp: β-1,6	essic	on of etylg	a Differentiation And lucosaminyltransferas	igen and Poly-N-acet e", <u>The Journal of B</u>	yll actosar iological (minyl <i>O</i> -gylca <u>Chemistry</u> 269	ans Direct 9(6):4473-	ted -4479
	вк	Bor 73:	fanti 1109-	et a: 1112	1., "I (1989)	PADGEN	(GMI	2140)	Is a Component of We:	bel-Palade Bodies of	Human Endo	othellial Cel	lls", Bloo	<u>od</u>
	BL	Bos	man S	., "G	lycote	echno1	.ogy [rugs	Begin to Emerge from	the Lab", <u>C6EN</u> 27-34	(June 28,	1993).		
	ВМ	Box Ce)	en et 1 Bio	al., 1., 10	"Chra	cteri	zatio (July	n of .	a Human Homologue of	the Murine Periphera	l Lymph Noc	de Homing Rec	eptor,"	J.
	BN		_							Adhesion Molecules",	<u>Cell</u> , 63:8	861-863.		
	во	Bro All	ckmeye ograft	er et E Reje	al.,	"Dist	ribut ansol	ion of	f Cell Adhesion Molection 55:610-615 (1993)	ules (ICAM-1, VCAM-1	, ELAM-1 in	Renal Tissu	e During	
	BP									ecules", <u>Nature</u> , 253	:753-755 (1	.975) .		
	BQ	But (19	trum e 93).	et al.	, "Se	lecti	n-Med	iated	Rolling of Neutrophi	ls on Immobilized Pla	atelets", B	lood, 83:116	5-1174	
	BR	Col Nat	man et ure, 3	al., 126:35	"Thr 58-363	ee-Di (198	mensi 7).	onal S	Structure of a Comple	x of Antibody with I	nfluenza Vi	rus Neuramin	idase",	
<u> </u>	BS	Cor	ral et h Acti	al., vated	*Req	uirem elets	ent f	or Sia ochemi	lic Acid on Neutroph cal and Biophysical	ils in a GMP-140 (PAI Research Communication	GEM) Media	ted Adhesive 49-1356 (199	Interact 0).	ion
 	ВТ									of Oklahoma Health Sc				
1	BU	Dam Reg	le et ulates	al., Thei	"GMP- r Pro	140 (ducti	P-sel	ectin/ Proin	CD62) Binds to Chron flammatory Cytokines	ically Stimulated but ", Eur. J. Immunol.,	not Resti 22:1789-17	ng CD4°T Lymp 93 (1992).	phocytes a	and
	BV	Daw	son et	al.,	"The	Mono	:lona	l Anti		k Lymphocyte Migratic			ic	

Pumpfenger "/27/06

F	_	1	(6)
EXA INIT			OTHER MATERIALS (Including, Author, Title, Date, Relevant Pages, Place of Publication.**
1//	<u>(</u>	BW	Dorê et al., "P-Selectin Mediates Spontaneous Leukocyte Rolling In Vivo", Blood, 82:1308-1316 (1993).
	1	вх	Dorfman et al., "Human Transcription Factor GATA-2", <u>J. Biol. Chem.</u> , 267:1279-1285 (1992).
	\downarrow	BY.	Dunlop et al., "Characterization of GMP-140 (P-selectin) as a Circulating Plasma Protein", J. Exp. Med., 175:1147-1150 (1992).
1	\downarrow	BZ	Edwards et al, "The Role of Leukocytes in the Activation of Blood Coagulation", <u>Seminars in Hematology</u> , 29:202-212 (1992).
	\perp	CA	Engleberts et al., "Generalized Inflammation During Peritonitis Evidenced by Intracutaneous E-Selectin Expression", Clinical Immunology and Immunopathology, 65:330-334 (1992).
		СВ	Engelberts et al., "A Role for ELAM-1 in the Pathogenesis of MOF during Septic Shock", <u>Journal of Surgical</u> <u>Research</u> , 53:136-144 (1992).
	L	CC	Franklin T., "Binding Energy and the Activation of Hormone Receptors", Pharmacology, 29:853-856 (1980).
		CD	Fukuda et al., "Structures of Sialylated Fucosyl Polylactosaminoglycans Isolated from Chronic Myelogenous Leukemia Cells," J. of Biol Chem, 260(24):12957-12967 (1985).
		CE	Fukushi et al., "Novel Fucolipids Accumulating in Human Adenocarcinoma," <u>J. of Biol. Chem.</u> , 259(16):10511-10517, (1984).
-		CF	Fuggle et al., "Variation in Expression of Endothelial Adhesion Molecules in Pretransplant and Transplanted Kidneys-Correlation with Intragraft Events", Transplantation, 55:117-123 (1993).
		ÇG	Gamble et al., "Prevention of Activated Neutrophil Adhesion to Endothelium by Soluble Adhesion Protein GMP140", Science, 249:414-417 (1990).
		СН	Geng et al., "Lectin Domain Peptides from Selectins Interact with Both Cell Surfact Ligands and Ca ^{2*} Ions", <u>J.</u> Biol. Chem., 267:19846-19853 (1992).
		CI	Geng et al., "Rapid Neutrophil Adhesion to Activated Endothelium Mediated by GMP-140", Nature 343:757-760 (1990).
		CJ	Gibbons et al., "New Mechanisms and Intermediates in the Folding and Unfolding of Peptides and Proteins: Bioactive solution Conformation of Linear Peptides", Peptides, 508-509 (1990).
	Ц	ск	Goelz et al., "ELFT: A Gene That Directs the Expression of an ELAM-1 Ligand," Cell, 63:1349-1356, (1990).
		CL	Grober et al., "Monocyte-Endothelial Adhesion in Chronic Rheumatoid Arthritis", <u>J. Clin. Invest.</u> , 91:2609-2619 (1993).
		CM	Hakomori S., "Aberrant Glycosylation in Cancer Cell Membranes as Focused on Glycolipids: Overview and Perspectives", Cancer Research, 45:2405-2414 (1985).
		CN	Hamburger et al., "GMP-140 Mediates Adhesion of Stimulated Platelets to Neutrophils", Blood, 75:550-554 (1990).
	Ц	СО	Handa et al., "Selectin GMP-140 (CD62; PADGEM) Binds to Sialosyl-Le*, and Sulfated Glycans Modulate this Binding", Biochemical and Biophysical Research Communications, 181:1223-1230 (1991).
	Ц	CP	Hard et al., "The Carbohydrate Chains of the β Subunit of Human Chorionic Gonadotropin Produced by the Choriocarcinoma Cell Line BeWo", Eur. J. Biochem, 205:785-798 (1992).
		CQ	Hattori et al., "Complement Proteins C5b-9 Induce Secretion of High Molecular Weight Multimers of Endothelial von Willebrand Factor and Translocation of Granule Membrane Protein GMP-140 to the Cell Surface", <u>J. Biol.</u> Chem., 264:9053-9060 (1989).
		CR	Hattori et al., "Stimulated Secretion of Endothelial von Willebrand Factor is Accompanied by Rapid Redistribution to the Cell Surface of the Intracellular Granule Membrane Protein GMP-140", J. Biol. Chem. 264:7768-7771 (1989).
	\prod	cs	Hemmerich et al., "Structure of the O-Glycans in BlyCAM-1, and Endothelial-derived Ligand for L-selectin", The Journal of Biological Chemistry 270(20):12035-12047 (1995).
	\prod	СТ	Hoff et al., "Increased Expression of Sialyl-Dimeric Le" Antigen in Liver Metastases of Human Colorectal Carcinoma", Cancer Research, 49:6883-6888 (1989).
	\downarrow	CU	Hollengaugh et al., "Interaction of P-Selectin (CD62) and Its Cellular Ligand: Analysis of Critical Residues" Biochemistry, 32:2960-2966 (1993).
		cv	Hyding et al., "A Lymphocyte Homing Receptor (L-Selectin) Mediates the <i>In Vitro</i> Attachment of Lymphocytes to yelinated Tracts of the Central Nervous System", J. Clin. Invest., 88:1778-1783 (1991).
		SW	Jewell et al., "Cytokine Induction of Leucocyte Adhesion Molecules-1 (LAM-1) Expression on Chronic Lymphocytic Leukaemia Cells", LEUKEMIA 6(5):400-404 1992).
	4	сх	Johnston et al., "Cloning of GMP-140: Chromosomal Localization, Molecular Heterogeneity and Identification of CDNAs Predicting Both Membrane Bound and Soluble Proteins", Blood Suppl., 72:327a (1988).

PHURIAMMEN 11/27/01

10/738478

[10-61					
EXAM INIT.		OTHER MATERIALS (Including, Author, Title, Date, Relavant Pages, Place of Publication. **)				
11)	CY	Johnston et al., "Cloning of GMP-140, a Granule Membrane Protein of Platelets and Endothelium: Sequence Similarity to Proteins Involved in Cell Adhesion and Inflammation", Cell, 56:1033-1044 (1989).				
	CZ	Johnston et al., "Structural and Biosynthetic Studies of the Granule Membrane Protein, GMP-140, from Human Platelets and Endothelial Cells", The Journal of Biological Chemistry, 264:1-8 (1989).				
	CZA	Johnston et al., Structure and Biosynthesis of the Platelet α -Granule Membrane Protein, GMP-140", <u>Platelets</u> , p. 352a, abstract § 1264.				
	DA	Johnston et al., "Structure of the Human Gene Encoding Granule Membrane Protein-140, a member of the Selectin Family of Adhesion Receptors for Leukocytes", The Journal of Biological Chemistry 265(34):21381-21385 (1990).				
	DB	Jungi et al., "Platelet-Leukocyte Interaction: Selective Binding of Thrombin-Stimulated Platelets to Human Monocytes, Polymorphonuclear Leukocytes, and Related Cell Lines", <u>Blood</u> 67(3):629-636 (1986).				
	DC	Kijima-Suda et al., "Possible Mechanism of Inhibition of Experimental Pulmonary Metastasis of Mouse Colon Adenocarcinoma 26 Sublines by a Sialic Acid:Nucleoside Conjugate," <u>Cancer Research</u> , 48:3728-3732, [Jul 1, 1998].				
	DE	Kojima et al., "Inhibition of Selectin-Dependent Tumor Cell Adhesion to Endothelial Cells and Platelets by Blocking O-Glycosylation of These Cells", <u>Biochemical and Biophysical Research Communication</u> , 182(3):1288-1295				
	DF	Korrel et al., "Identification of Tetrasialylated Monofucosylated Tetraantennary N-linked Carbohydrate Chain in Human Platelet Glycocalicin," FEBS LETTERS, 228(2):321-326, (Feb 1988).				
	DG	Laczko-Hollosi et al., "Conformational Change of a Synthetic Amyloid Analogue des[Ala ^{21,30}]A42 Upon Binding to Octyl Glucoside Micelles," <u>Peptides</u> , 527-528, (1992).				
	DH	Laiken et al., "A New Model for the Binding of Flexible Ligands to Proteins", <u>Biochemistry</u> , 10:2101-2106 (1971).				
	DI	Larsen et al., "PADGEM Protein: A Receptor That Mediates the Interaction of Activated Platelets with Neutrophils and Monocytes," Cell, 59:305-312, (Oct 20, 1989).				
	DJ	Larsen et al., "PADGEM-Dependent Adhesion of Platelets to Monocytes and Neutrophils Is Mediated by a Lineage- Specific Carbohydrate, LNF III (CD15)", Cell, 63:467-474 (1990).				
	DK	Lasky et al., "Cloning of a Lymphocyte Homing Receptor Reveals a Lectin Domain," <u>Cell</u> , 56:1045-1055, (Mar 24, 1989).				
	DL	Lawrence et al., "Leukocytes Roll on a Selectin at Physiologic Flow Rates: Distinction from and Prerequisite for Adhesion through Integrins", Cell, 65:1-20 (1991).				
	DM	Levinovitz et al., "Identification of a Glycoprotein Ligand for E-Selectin on Mouse Myeloid Cells", The Journal of Cell Biology", 121(2):449-459 (1993).				
	DN	Ley et al., "Lectin-Like Cell Adhesion Molecule 1 Mediates Leukocyte Rolling in Mesenteric Venules In Vivo", Blood, 77(12):2553-2555 (1991).				
	DO	Li et al., "T Cells Expressing Both L-Selectin and CD44 Molecules Increase in Number in Peritoneal Exudate Cells and In Vitro-Stimulated Spleen Cells from Mice Immunized Intraperitoneally with Listeria Monocytogenes", Immunology, 78:28-34 (1993).				
	DP	Liao et al, "Oxidized Lipoproteins, Elicit Leukocyte-Endothelial Cell Adhesion in Mesenteric Venules", The FASEB Journal, 7(3):1986 (1993).				
	DQ	Lowe et al., "ELAM-1-Dependent Cell Adhesion to Vascular Endothelium Determined by a Transfected Human Fucosyltransferase cDNA," Cell, 63:475-484, (Nov 2, 1990).				
11	DR	Lowe et al., "A Transfected Human Fucosyltransferase cDNA Determines Biosynthesis of Oligosaccharide Ligand(s) for Endothelial-Leukocyte Adhesion Molecule 1", Biochemical Society Transaction, 19:649-653 (1991).				
	DS	Maemura et al, "Poly-N-Acetyllactosaminyl O-Glycans Attached to Leukosialin", The Journal of Biological Chemistry, 267(34):24379-24386 (1992).				
	DT	Majuri et al., "Recombinant E-selectin-protein Mediates Tumor Cell Adhesion via Sialyl-Lea and Sialyl-Lex", Biochemical and Biophysical Research Communications, 182(3):1376-1382 (1992).				
	DU	Mayadas et al., "Leukocyte Rolling and Extravasation Are Severely Compromised in P Selectin-Deficient Mice", Cell, 74:541-554 (1993).				
	DV	McEver et al., "GMP-140 a Platelet α-Granule Membrane Protein, Is Also Synthesized by Vascular Endothelial Cells and Is Localized in Weibel-Palade Bodies," J. Clin. Invest., 84:92-99, (Jul 1989).				
	DW	McEver R., "GMP-140: A Receptor for Neutrophils and Monocytes on Activated Platelets and Endothelium," J. of Cell Biochem, 45:156-161 (1991).				
	/DX	McEver R., "Editorial: Misguided Leukocyte Adhesion," <u>J. Clin. Invest.</u> , 91:2340-2341, (Jun 1993).				
	DY	McEver R., " The Platelet α-Granule Membrane Protein GMP-140 is also Synthesized by Human Vascular Endothelial Cells and is Present in Blood Vessels of Diverse Tissues," Blood Suppl., 70:355a, (Nov 1987).				

PHUP SIMME 11/27/06

1644

		T	
	CAM HT.	ļ	OTHER MATERIALS (Including, Author, Title, Date, Relevant Pages, Place of Publication. **)
14	<u>/</u>	DZ	McEver R., "Leukocyte-Endothelial Cell Interactions", <u>Current Opinion in Cell Biology</u> , 4:840-849 (1992).
		DZA	McEver et al., "A Monoclonal Antibody to a Membrane Glycoprotein Binds Only to Activated Platelets", The Journal of Biological Chemistry, 259(15):9799-9804 (1984).
-	<u>.</u>	DZB	McEver R., "Properties of GMP-140, an Inducible Granule Membrane Protein of Platelets and Endothelium", <u>Blood</u> Cells, 16:73-83 (1990).
		EA	McEver R., "Selectins: Novel Receptors that Mediate Leukocyte Adhesion During Inflammation", Thrombosis and Haemostasis, 65(3):223-228 (1991).
\prod		EB	Mengelers et al., "Down Modulation of L-Selectin Expression on Eosinophils Recovered from Bronchoalveloar Lavage Fluid After Allergen Provocation," Clinical and Experimental Allergy, 23:196-204, [1993].
		EC	Montefort et al., "The Expression of Leukocyte-Endothelial Adhesion Molecules Is Increased in Perennial Allergic Rhinitis," Am. J. Respir. Cell Mol. Biol., 7:393-398, (1992).
		ED	Moore et al., "GMP-140 Binds to a Glycoprotein Receptor on Human Neutrophils: Evidence for a Lectin-Like Interaction", The Journal of Cell Biology, 112(3):491-499 (1991).
		EE	Moore et al., "Identification of a Specific Glycoprotein Ligand for P-Selectin (CD62) on Myeloid Cells", <u>The</u> <u>Journal of Cell Biology</u> , 118(2):445-456 (1992).
		EF	Moore et al., "P-Selectin (CD62) Binds to Subpopulations of Human Memory T Lymphocytes and Natural Keller Cells", Biochemical and Biophysical Research Communications, 186(1):173-181 (1992).
		EG	Mulligan et al., "Neutrophil-Dependent Acute Lung Injury," <u>J. Clin. Invest.</u> , 90:1600-1607, (Oct 1992).
	_	EH	Mulligan et al., "Protective Effects of Oligosaccharides in P-Selectin-Dependent Lung Injury", <u>Nature</u> 364:149-
_	\downarrow	EI	Mulligan et al., "Role of Endothelial-Leukocyte Adhesion Molecule 1 (ELAM-1) in Neutrophil-Mediated Lung Injury in Rats," J. Clin. Invest., 88:1396-1406, (Oct 1991).
	1	EJ	Munro et al., "Expression of Sialyl-Lewis X, an E-Selectin Ligand, IN Inflammation, Immune Processes, and Lymphoid Tissues", American Journal of Pathology, 141(6):12397-1408 (1992).
<u> </u>	_	EK	Nelson et al., "Higher-Affinity Oligosaccharide Ligands for E-Selectin", <u>J. Clin. Invest.</u> , 91:1157-1166 (1993).
	_	EL	Newman et al., "Soluble E-Selectin is Found in Supernatants of Activated Endothelial Cells and Is Elevated in the Serum of Patients with Septic Shock," J. of Immun., 150(2):644-654, (Jan 15, 1993).
		EM	Norgard et al., "Characterization of a Specific Ligand for P-Selectin on Myeloid Cells: A Minor Glycoprotein With Sialylated O-linked Oligosaccharides", The Journal of Biological Chemistry, 268(18):12764-12774 (1993).
 		EN	Norton et al., "Expression of Adhesion Molecules in Human Intestinal Graft-Versus-Host Disease," <u>Clin. Exp.</u> <u>Immunol.,</u> 87:231-236, (1992).
		EO	Ockenhouse et al., "Human Vascular Endothelial Cell Adhesion Receptors for <i>Plasmodium falciparum</i> -infected Erythrocytes: Roles for Endothelial Leukocyte Adhesion Molecule 1 and Vascular Cell Adhesion Molecule 1," <u>J. of Exp. Med.</u> , 176:1183-1189, (Oct 1992).
		EP	Ord et al., "Structure of the Gene Encoding the Human Leukocyte Adhesion Molecule-1 (TQ1, Leu-8) of Lymphocytes and Neutorphils," J. Biol. Chem., 265(14):7760-7767, (May 15, 1990).
	\downarrow	EQ	Paik et al., "Nucleotide Sequence and Structure of the Human Apolipoprotein E Gene," <u>Proc. Natl. Acad. Sci.</u> USA, 82:3445-3449, (May 1985).
	$\perp \downarrow$	ER	Palabrica et al., "Leukocyte Accumulation Promoting Fibrin Deposition Is Mediated <i>In Vivo</i> by P-selectin on Adherent Platelets," Nature, 359:848-851, (Oct 29, 1992).
	Д	ES	Pan et al., "Identification of a Promoter Region in the Human GMP-140 Gene that Confers Tissue-Specific Expression," Blood, 78(10):279a, (1991).
	Ц	ET	Pan et al., "Characterization of the Promoter for the Human P-selectin Gene," <u>J. of Biol. Chem.</u> , 268(30):22600-26608, (1993).
		EU	Patel et al., "Oxygen Radicals Induce Human Endothelial Cells to Express GMP-140 and Bind Neutrophils," <u>J. of</u> Cell Biol., 112(4):749-759, (Feb 1991).
	\Box	EV	Phillips et al, "ELAM-1 Mediates Cell Adhesion by Recognition of a Carbohydrate Ligand, Sialyl-Le*", <u>Science</u> 250:1130-1132 (1990).
	_	EW	Polley et al., "CD62 and Endothelial Cell-Leukocyte Adhesion Molecule 1 (ELAM-1) Recognize the Same Carbohydrate Ligand, Sialyl-Lewis x", Proc. Natl. Acad. Sci. USA, 88:6224-6228 (1991).
	4	ЕХ	Postigo et al., "Increased Binding of Synovial T Lymphocytes from Rheumatoid Arthritis to Endothelial-Leukocyte Adhesion Molecule-1 (ELAM-1) and Vascular Cell Adhesion Molecule-1 (VCAM-1)," <u>J. Clin. Invest.</u> , 89:1445-1452, (May 1992).
Y		EY	Rinder et al., "Cardiopulmonary Bypass Induces Leukocyte-Platelet Adhesion," <u>Blood</u> , 79(5):1201-1205, (Mar 1, 1992).

Her Grange 11/27/9

10/738 478	3
------------	---

	EXAM		
\	INIT.		OTHER MATERIALS (Including, Author, Title, Date, Relevant Pages, Place of Publication. **)
		EZ	Rini et al., "Structural Evidence for Induced Fit as a Mechanism for Antibody-Antigen Recognition," <u>Science</u> , 255(5047):959-965, (1992).
L	_	EZA	Rosen S., "The LEC-CAMs: An Emerging Family of Cell-Cell Adhesion Receptors Based Upon Carbohydrate Recognition," Am. J. Respir. Cell. Mol. Biol., 3:397-402, (1990).
	1_	FA	Ruoslahti et al., "New Perspectives in Cell Adhesion: RGD and Integrins," <u>Science</u> , 238:481-497, (1987).
L		FB	Sanders et al., "Molecular Cloning and Analysis of <i>In Vivo</i> Expression of Murine P-Selectin," <u>Blood</u> , 80(3):795-
L		FC	Shreeniwas et al., "Hypoxia-Mediated Induction of Endothelial Cell Interleukin-lq," <u>J. Clin. Invest.</u> , 90:2333-2339, (Dec 1992).
		FD	Siegelman et al., "Mouse Lymph Node Homing Receptor cDNA Clone Encodes a Glycoprotein Revealing Tandem Interaction Domains," <u>Science</u> , 243:1165-1172, (Mar 3, 1989).
		FE	Siegelman et al., "Human Homologue of Mouse Lymph Node Homing Receptor: Evolutionary Conservation at Tandem Cell Interaction Domains," Proc. Natl. Acad. Sci. USA, 86:5562-5566, (Jul 1989).
L	<u> </u>	FF	Siligardi et al., "Correlations Between Biological Activities and Conformational Properties of Elcatonin and Porcine Calcitonin Elucidated by CD," Petides 1992, 553-554, (1993).
L		FG	Simmons et al., "Sialyl Ligands Facilitate Lymphocyte Accumulation During Inflammation of the Central Nervous System", Journal of Neuroimmunology, 41:123-130 (1992).
L		FH	Skinner et al., "Characterization of Human Platelet GMP-140 as a Heparin-Binding Protein," <u>Biochem. and</u> Biophys. Res. Comm., 164(3):1373-1379, (Nov 15, 1989).
L		FI	Skinner et al, "GMP-140 Binding to Neutrophils Is Inhibited by Sulfated Glycans", The Journal of Biological Chemistry, 266(9):5371-5374 (1991).
Ŀ		FJ	Spertini et al., "Monocyte Attachment to Activated Human Vascular Endothelium In Vivo Is Mediated by Leukocyte Adhesion Molecule-1 (L-Selectin) under Nonstatic Conditions," J. Exp. Med., 175(6):1789-1792, (1992).
Ц		FK	Spooncer et al., "Isolation and Characterization of Polyfucosylated Lactosaminoglycan from Human Granulocytes," J. of Biol. Chem., 259(8):4792-4801, (1984).
Ц		FL	Springer et al., "Sticky Sugars for Selectins," <u>Nature</u> , 349:196-197, (Jan 17, 1991).
		FM	Stanley et al., "The LEC11 Chinese Hamster Ovary Mutant Synthesizes N-Linked Carbohydrates Containing Sialylated, Fucosylated Lactosamine Units Analysis by One- and Two-Dimensional ¹ H NMR Spectroscopy," <u>J. of Biol. Chem.</u> , 263(23):11374-11381, (Aug 15, 1988).
Ш		FN	Steinhoff et al., "Expression Patterns of Leukocyte Adhesion Ligand Molecules on Human Liver Endothelia," Am. Jour. of Path., 142(2):481-488, (1993).
		FO	Steininger et al., "The Glycoprotease of <i>Pasteurella haemolytica</i> Al Eliminates Binding of Myeloid Cells to P-Selectin but not to E-Selectin," <u>Biochem. and Biophys. Rese. Comm.</u> , 188(2);760-766, (Oct 30, 1992).
Ц		FP	Stenberg et al., "A Platelet Alpha-Granule Membrane Protein (GMP-140) Is Expressed on the Plasma Membrane after Activation," J. of Cell Biol., 101:880-886, (Sep 1985).
\parallel		FQ	Stone et al., "P-Selectin Mediates Adhesion of Platelets to Neuroblastoma and Small Cell Lung Cancer," <u>J. Clin.</u> Invest., 92:804-813, (Aug 1993).
\parallel		FR	Takada et al., Adhesion of Human Cancer Cells to Vascular Endothelium Mediated*, <u>Biochemical and Biophysical</u> Research Communications, 179(2):713-719 (1991).
		FS	Takada et al., "Contribution of Carbohydrate Antigens Sialyl Lewis A and Sialyl Lewis X to Adhesion of Human Cancer Cells to Vascular Endothelium," Cancer Research, 53:354-361, (1993).
\parallel		FT	Taylor J., "Conformation Induction in Amphiphilic Peptide Hormones Bound to Model Interfaces," Pept: Chem. Struct. Biol., Proc. Am. Pept. Symp. 11th, 592-594, (1990).
		FU	Tedder et al., "Isolation and Chromosomal Localization of cDNAs Encoding a Novel Human Lymphocyte Cell Surface Molecule, LAM-1," J. Exp. Med., 170:123-133, (Jul 1989).
<u> </u>		FV	Thierry et al., "Intracellular Availability of Unmodified, Phosphorothioated and Liposomally Encapsulated Oligodeoxynucleotides for Antisense Activity," Nucleic Acids Research, 20(21):5691-5698, (1992).
otin		FW	Tiemeyer et al., "Carbohydrate Ligands for Endothelial-Leukocyte Adhesion Molecule 1", Proc. Natl. Acad. Sci. USA, 88:1138-1142 (1991).
		FX	Till et. al., "Adhesion Molecules in Experimental Phacoanaphylactic Endophthalmitis," <u>Investigative</u> Ophthalmology 6 Visual Science, 33(12):3417-3423, (1992).
_\$	\coprod	FY	Todderud et al., "Soluble GMP-140 Inhibits Neutrophil Accumulation in Induced Murine Peritonitis," <u>FASEB</u>
	4	FZ	van der Wal et al., "Adhesion Molecules on the Endothelium and Mononuclear Cells in Human Atherosclerotic Lesions," Amer. J. of Path., 141(6):1427-1433, (1992).

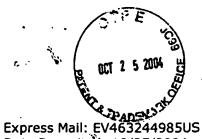
To 4 1/2 7/166

Page __7_ of __7_

10/738478

i			
EXA			OTHER MATERIALS
 			(Including, Author, Tide, Date, Relevant Pages, Place of Publication. **)
	L	FZ2	Varki, "Selectin Ligands," Proc. Natl. Acad. Sci. USA, 91:7390-7397, 1994.
~	1	FZA	Volpes et al., "Vascular Adhesion Molecules in Acute and Chronic Liver Inflammation," <u>Hepatology</u> , 15(2):269-275, (1992).
	1	GA	von Andrian et al., "Two Step Model of Leukocyte-Endothelial Cell Interaction in Inflammation: Distinct Roles for LECAM-1 and the Leukocyte β2 Integrins <i>In Vivo</i> ," Proc. Natl. Acad. Sci., 88(17):7538-42, (Sept. 1, 1991).
		GB	Walz et al., "Recognition by ELAM-1 of the Sialyl-Le" Determinant on Myeloid and Tumor Cells", Science, 250:1132-1135 (1990).
		GC	Watson et al., "Genomic Organization of the Selectin Family of Leukocyte Adhesion Molecules on Human and Mouse Chromosome 1," J. Exp. Med., 172:263-272, (July 1990).
<u></u>	4	GD	Watson et al., "Neutrophil Influx Into an Inflammatory Site Inhibited by a Soluble Homing Receptor-IgG Chimaera," Nature, 349:164-167, (Jan. 10, 1991).
	\perp	GE	Weyrich et al., "In Vivo Neutralization of P-Selectin Protects Feline Heart and Endothelium in Myocardial Ischemia and Reperfusion Injury," J. Clin. Invest., 91:2620-2629, (Jun 1993).
·	\coprod	GF	Winn et al., "Anti-P-Selectin Monoclonal Antibody attenuates Reperfusion Injury to the Rabbit Ear", <u>J. Clin.</u> Invest., 92:2042-2047 (1993).
		GG	Winn et al., "Monoclonal Antibodies to P-Selectin Are Effective in Preventing Reperfusion Injury to Rabbit Ears", Supplement I Circulation, 86(4):0316 (1992).
		GH	Zhou et al., "The Selectin GMP-140 Binds to Sialylated, Fucosylated Lactosaminoglycans on Both Myeloid and Nonmyeloid Cells", The Journal of Cell Biology, 115(2):557-564 (1991).
LA		1	
	<u>~</u>		
EXAM	MINER		DATE CONSIDERED
EXAN	IINER	: Initial if cit	itation considered, whether or not citation is in conformance and not considered. Include copy of this form with next communication to applicant. **Place of Publication

Heur Gauna-11/27/01



Date Deposited: 10/25/2004

Substitute for form 1449A/PTO

SUPPLEMENTAL INFORMATION **DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known						
Application Number	10/738,478					
Filing Date	12/17/2003					
First Named Inventor	Richard D. Cummings et al.					
Group Art Unit	1644 (Conf. No. 8217)					
Examiner Name	Unknown					
Attorney Docket Number	5838.076					

			U. S. PATEN	T DOCUMENTS			
EXAM INIT.	Cite No. 1	U.S. PATENT NUMBER Number	Kind Code² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, U Where Releval Passages or Relev Figures Appea	nt vant
		FOR	EIGN PATE	ENT DOCUMENT	S		
EXAM INIT.	Cite No. 1	Foreign Patent Document Office 3 Number 4	Ment Kind Code5 (If known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Unes Lines, Where Relevant Passages or Relevant Figures Appear	Τ*
N)	EP 03 02 2227		European Search Report; McEVER ET AL.	07/30/2004		
N	$/ \setminus$	WO 92/07572		Univ Michigan; LOWE	05/14/1992		
1		WO 92/18210		Univ Leland Stanford Junior; MAGNANI	10/29/1992	·	

U.S. and Foreign: ¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). ⁴Form Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

PHUN (106

10/738478

Page <u>2</u> of <u>2</u>

EXAM INIT.		PATENT DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
N		LO-GUIDICE ET AL., "Sialylation and Sulfation of the Carbohydrate Chains in Respiratory Mucins from a Patient with cystic Fibrosis", <i>Journal of Biological Chemistry</i> , Vo. 269, No. 29, July 22, 1994, pp. 18974-18813, XP002022672.		
M		MOORE ET AL., "The P-selectin Glycoprotein Lignad from Human Neutrophils Displays Sialylated, Fucosylated, <i>O</i> -Linked Poly- <i>N</i> -acetyllactosamine", <i>Journal of Biological Chemistry</i> , vo. 269, No. 37, Sept. 16, 1994, pp. 23318-23327, XP002022674.		
Non Pate	nt Docum	nents: 1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.		
Examiner	Examiner Signature: Date Considered:			
		citation considered, whether or not citation is in conformance and not considered. Include copy of this form with next communication to applicant. **Place of name of publication in which the information was published.		

5838.076 1449 new version.wpd

PHAUG GMB2-11/27/06